

10/758,589

PRIORITY DATE: January 15, 2003

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enhanced  
NEWS 6 OCT 22 WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT  
Applications  
NEWS 7 OCT 24 CHEMLIST enhanced with intermediate list of  
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and Japanese-language basic patents from 2004-present  
NEWS 9 NOV 26 MARPAT enhanced with FSORT command  
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coverage of complete UK patent families  
NEWS 15 DEC 17 Fifty-one pharmaceutical ingredients added to PS  
NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
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FILE 'HOME' ENTERED AT 13:29:11 ON 30 DEC 2008

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY

SESSION

0.21

0.21

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STRUCTURE FILE UPDATES: 29 DEC 2008 HIGHEST RN 1091682-77-7

DICTIONARY FILE UPDATES: 29 DEC 2008 HIGHEST RN 1091682-77-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

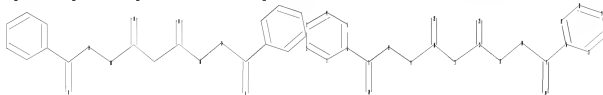
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on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10758589\_NEW\_20080624.str



chain nodes :

7 8 9 10 11 12 13 14 15 22 23 24 25

ring nodes :

1 2 3 4 5 6 16 17 18 19 20 21

chain bonds :

6-7 7-8 7-24 8-9 9-10 10-11 10-22 11-12 12-13 12-23 13-14 14-15 15-16  
15-25

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 16-17 16-21 17-18 18-19 19-20 20-21

exact/norm bonds :

7-8 7-24 8-9 10-22 12-13 12-23 13-14 14-15 15-25

exact bonds :

6-7 10-11 11-12 15-16

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 16-17 16-21 17-18 18-19 19-20 20-21

Match level :

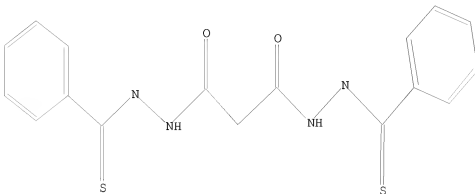
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS  
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom  
19:Atom 20:Atom 21:Atom 22:CLASS 23:CLASS 24:CLASS 25:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

FULL SEARCH INITIATED 13:30:10 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 384 TO ITERATE

100.0% PROCESSED 384 ITERATIONS

111 ANSWERS

SEARCH TIME: 00.00.01

L2 111 SEA SSS FUL L1

=> file medline caplus wpids uspatfull

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'MEDLINE' ENTERED AT 13:30:21 ON 30 DEC 2008

FILE 'CAPLUS' ENTERED AT 13:30:21 ON 30 DEC 2008

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=> s l2

SAMPLE SEARCH INITIATED 13:30:25 FILE 'WPIDS'

SAMPLE SCREEN SEARCH COMPLETED - 18 TO ITERATE

100.0% PROCESSED 18 ITERATIONS 8 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 53 TO 307  
PROJECTED ANSWERS: 8 TO 164

L3 53 L2

=> s l3 and (?cancer? or ?carcin? or ?neoplasm? or ?tumor? or ?tumour? or ?sarcom?)  
L4 42 L3 AND (?CANCER? OR ?CARCIN? OR ?NEOPLASM? OR ?TUMOR? OR ?TUMOUR  
? OR ?SARCOM?)

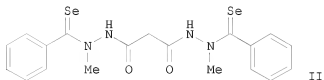
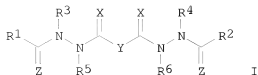
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DUPLICATE PREFERENCE IS 'CAPLUS, USPATFULL'  
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n  
PROCESSING COMPLETED FOR L4  
L5 41 DUPLICATE REM L4 (1 DUPLICATE REMOVED)

=> d l5 1-41 ibib, abs

L5 ANSWER 1 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2008:1360739 CAPLUS  
DOCUMENT NUMBER: 149:556283  
TITLE: Preparation of  
di(phenylcarbonoselenenoyl)malonohydrazide derivatives  
and analogs for use in treating proliferative  
disorders  
INVENTOR(S): Koya, Keizo; Ying, Weiwen; Przewloka, Teresa; Sun,  
Lijun  
PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
SOURCE: PCT Int. Appl., 178pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008136976	A2	20081113	WO 2008-US5512	20080428
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: US 2007-926890P P 20070430  
GI



AB Title compds. I [each X independently = O, S, Se, Te, Po, etc.; Y = covalent bond, N(R5), (un)substituted alkylene, etc.; or Y = C(R5)p and is taken together with both C=X groups to form an (un)substituted monocyclic aromatic group; each Z independently = O, S, Se, Te, Po, etc.; R1 and R2 independently = (un)substituted alkyl, alkenyl, cycloalkyl, aryl, etc.; R3 and R4 independently = H, (un)substituted alkyl, heterocyclyl, etc.; R5 and R6 independently = H, (un)substituted alkyl, alkenyl, alkynyl, etc.; p = 1 or 2; with provisions], and their pharmaceutically acceptable salts, are prepared and disclosed as therapeutic agents for proliferative disorders. Thus, e.g., II was prepared by selenylation of N-methylbenzohydrazide followed by amidation with malonic acid. I were evaluated in Hsp70 ELISA assays, e.g., II demonstrated an ED50 value of 70 nM. I were disclosed as therapeutic agents for use in treating proliferative disorders, such as cancer, and disorders responsive to Hsp70 induction and/or natural killer induction.

L5 ANSWER 2 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:831279 CAPLUS

DOCUMENT NUMBER: 149:160584

TITLE: Method for treating cancer comprising administering compound that increases oxidative stress of cancer cells and activates p38

INVENTOR(S): Betin, John; Kirshner, Jessica R.; Du, Zhenjian

PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA

SOURCE: PCT Int. Appl., 124pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

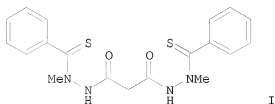
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WO 2008082579	A1	20080710	WO 2007-US26343	20071227
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TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
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 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,  
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2007-878557P P 20070103

OTHER SOURCE(S): MARPAT 149:160584

GI



AB The invention relates to a method of treating cancer in a subject, comprising administering to the subject an anti-cancer therapy and a compound that increases the oxidative stress of the cancer cells and activates p38, such as compound (I). It is related to the discovery that the efficacy of standard treatments for cancer, such as chemotherapy or radiation treatment, can be increased by administering them in combination with an agent that increase the oxidative stress of cancer cells by inhibiting the mechanisms that cancer cells utilize to compensate for ROS and/or activating cellular signaling pathways that lead to immunocytotoxicity. Thus, formulation comprising paclitaxel (5 mg/kg) + compound I (50 mg/kg) significantly enhanced antitumor activity of paclitaxel on human breast tumor MDA-MB-435 in nude mice, without increasing toxicity.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:353362 CAPLUS

DOCUMENT NUMBER: 148:355516

TITLE: Purification of bis(thiohydrazide amides)

INVENTOR(S): Chen, Shoujun; Xia, Zhi-Qiang; Kostik, Elena; Koya, Keizo; Sun, Lijun

PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA

SOURCE: PCT Int. Appl., 36pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

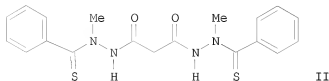
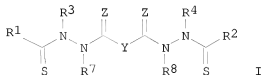
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008033494	A2	20080320	WO 2007-US19987	20070914
WO 2008033494	A3	20080515		
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TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,  
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

US 20080146842 A1 20080619 US 2007-901265 20070914  
 PRIORITY APPLN. INFO.: US 2006-844776P P 20060915  
 OTHER SOURCE(S): MARPAT 148:355516  
 GI



AB Claimed is a method for purifying the title compds. I [Y = covalent bond, (un)substituted straight chained hydrocarbyl group, or Y, taken together with both C:Z groups to which it is bonded, is (un)substituted aromatic group; R1 - R4 = H, (un)substituted aliphatic group, (un)substituted aryl group; or R1 and R3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R2 and R4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring; R7, R8 = H, (un)substituted aliphatic group, (un)substituted aryl group; Z = O, S] comprising dissolving the compound in a solvent selected from the group consisting of THF-acetone, THF-MeCN, THF, acetone, MeCN, THF-EtOH, or acetone-EtOH, and precipitating the compound with water. The title compds. enhance the anticancer activity of taxol and taxol analogs (no data). Thus, MeCN 6 mL was added to a solution of the title compound II (2 g; purity 95%) in THF 20 mL cooled to 0°C - 4°C; cold water 60 mL was added to the mixture; the resulting mixture was stirred for 3 h and then filtered; the precipitate was washed with cold THF-water and dried to give II (1.8 g; purity 98%).

L5 ANSWER 4 OF 41 CAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 2008:285694 CAPLUS  
 DOCUMENT NUMBER: 148:299878  
 TITLE: Combination with bis(thiohydrazide amides) for treating cancer  
 INVENTOR(S): Koya, Keizo  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 125pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008027445	A2	20080306	WO 2007-US19021	20070830
WO 2008027445	A3	20080626		
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US 20080119440	A1	20080522	US 2007-897538	20070830
PRIORITY APPLN. INFO.:			US 2006-841570P	P 20060831
OTHER SOURCE(S): MARPAT 148:299878				
<p>AB Disclosed herein are methods of treating a proliferative disease, such as cancer, with bis(thio-hydrazide amides) or a tautomer, pharmaceutically acceptable salt, solvate, clathrate, or prodrug thereof, in combination with hyperthermia treatment. Also disclosed are methods of treating a proliferative disease, such as cancer, with bis(thio-hydrazide amides) or a tautomer, pharmaceutically acceptable salt, solvate, clathrate, or prodrug thereof, in combination with radiotherapy.</p>				
<p>L5 ANSWER 5 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN</p> <p>ACCESSION NUMBER: 2008:255663 CAPLUS</p> <p>DOCUMENT NUMBER: 148:299870</p> <p>TITLE: Treating melanoma with bis(thiohydrazide amides)</p> <p>INVENTOR(S): McLeod, Matthew</p> <p>PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA</p> <p>SOURCE: PCT Int. Appl., 155pp.</p> <p>CODEN: PIXXD2</p> <p>DOCUMENT TYPE: Patent</p> <p>LANGUAGE: English</p> <p>FAMILY ACC. NUM. COUNT: 1</p> <p>PATENT INFORMATION:</p>				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008024305	A2	20080228	WO 2007-US18381	20070820
WO 2008024305	A3	20080619		
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US 20080226588	A1	20080918	US 2007-894270	20070820
PRIORITY APPLN. INFO.:			US 2006-838977P	P 20060821
OTHER SOURCE(S): MARPAT 148:299870				
<p>AB Disclosed herein are methods of treating lentigo maligna, superficial spreading malignant melanoma, acral lentiginous malignant melanoma or</p>				



nodular malignant melanoma with bis(thio-hydrazide amides) represented or pharmaceutically acceptable salts thereof, pharmaceutical compns. comprising these bis(thio-hydrazide amides) and compns. comprising these bis(thiohydrazide)amides and one or more anticancer agent.

L5 ANSWER 6 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:253186 CAPLUS

DOCUMENT NUMBER: 148:307950

TITLE: Preparation of phenylcarbonothiohydrazide prodrugs via condensation reaction for treating proliferative disorders

INVENTOR(S): Chen, Shoujun; Koya, Keizo; Demko, Zachary; Sun, Lijun

PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA

SOURCE: PCT Int. Appl., 21pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008024303	A2	20080228	WO 2007-US18378	20070820
WO 2008024303	A3	20081127		

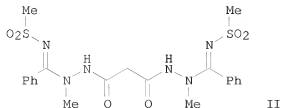
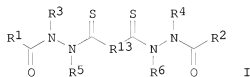
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2006-839034P P 20060821  
US 2006-841408P P 20060831

OTHER SOURCE(S): MARPAT 148:307950

GI



AB Title compds. I [wherein R1 and R2 are independently alkyl, alkenyl,

alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl, aryl, heteroaryl, halo, nitro, cyano, guanadino, -OR17, -NR19R20, -C(O)R17, -C(O)OR17, -OC(O)R17, -C(O)NR19R20, -NR18C(O)R17, -OP(O)(OR17)2, -SP(O)(OR17)2, -SR17, -S(O)pR17, -OS(O)pR17, -S(O)pOR17, -NR18S(O)pR17, or -S(O)pNR19R20; R3 and R4 are independently -H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl, aryl or heteroaryl; R5 and R6 are independently -H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl; aryl or heteroaryl; R13 is covalent bond, alkylene; R17 and R18 are independently, -H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroalkyl; R19 and R20 are independently -H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclyl, aryl, heteroaryl, aralkyl, or heteroalkyl; or R19 and R20, taken together with the N to which they are attached, form heterocyclyl or heteroaryl; and p is 1 or 2; provided that when R13 is -CH2-, R3 and R4 are both Ph and R5 and R6 are both -H, then R1 and R2 are not both phenyl; and provided that when R13 is -CH2-, R3 and R4 are both Ph and R5 and R6 are both -H, then R1 and R6 are not both Me, and their pharmaceutically acceptable salts, were prepared and disclosed as antiproliferative agents. Thus, e.g., II was prepared via condensation of N-(methylsulfonyl)benzimidoyl chloride with N'1,N'3-dimethylmalonohydrazide in CH2Cl2. The ability of I to induce Hsp70 RNA induction was measured relative to N-malonyl-bis(N'-methyl-N'-thiobenzoylhydrazide) (III), e.g., II was found to provide 0.75% induction relative to III. Also, disclosed are pharmaceutical compns. comprising compds. of the invention and a pharmaceutically acceptable carrier.

L5 ANSWER 7 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:255437 CAPLUS  
DOCUMENT NUMBER: 148:299869  
TITLE: Treating melanoma with bis(thiohydrazide amides)  
INVENTOR(S): Williams, Martin; McLeod, Matthew; Koya, Keizo  
PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
SOURCE: PCT Int. Appl., 109 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008024301	A2	20080228	WO 2007-US18357	20070820
WO 2008024301	A3	20080710		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

PRIORIT:11 APPLN. INFO.: US 2006-030966P P 20060621

OTHER SOURCE(S): MARPAT 148:299869

AB Disclosed herein are methods of preventing or delaying the recurrence of melanoma in a subject with bis(thio-hydrazide amides) represented or pharmaceutically acceptable salts thereof, pharmaceutical compns.

comprising these bis(thio-hydrazide amides) and compns. comprising these bis(thiohydrazide)amides and one or more anti cancer agent.

L5 ANSWER 8 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2008:256009 CAPLUS  
 DOCUMENT NUMBER: 148:299872  
 TITLE: Bis(thiohydrazide amide) combination with immunotherapy for treating cancer  
 INVENTOR(S): Jacobson, Eric  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 143pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008024299	A2	20080228	WO 2007-US18354	20070820
WO 2008024299	A3	20080417		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

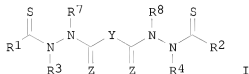
PRIORITY APPLN. INFO.: US 2006-839113P P 20060821  
 OTHER SOURCE(S): MARPAT 148:299872  
 AB The invention discloses methods for treating an immunosensitive cancer with bis(thiohydrazide amides), or pharmaceutically acceptable salts thereof, and an immunotherapy. Comps. of the invention include e.g. PhC(S)N(Me)NHC(O)CH2C(O)NHN(Me)C(S)Ph.

L5 ANSWER 9 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2008:252684 CAPLUS  
 DOCUMENT NUMBER: 148:276787  
 TITLE: Therapeutic bis(thiohydrazide amides) for inhibiting angiogenesis  
 INVENTOR(S): Barsoum, James; Foley, Kevin  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 50pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008024298	A1	20080228	WO 2007-US18353	20070820
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,				

PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,  
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2006-838956P P 20060821  
 OTHER SOURCE(S): MARPAT 148:276787  
 GI



AB Disclosed herein are methods of inhibiting angiogenesis in a subject in need thereof with bis(thio-hydrazide amides) represented by general formula I, wherein Y is a covalent bond or an (un)substituted straight chained hydrocarbonyl group, or Y, taken together with both >C=Z groups is an (un)substituted aromatic group; R1-R4 are H, (un)substituted aliphatic or aryl group, or R1 plus R3 and R2 plus R4 are part of a nonarom. heterocyclic ring optionally fused to an aromatic ring; R7-R8 are independently H, (un)substituted aliphatic or aryl group; and Z is O or S.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 41 USPTFULL ON STN

ACCESSION NUMBER: 2008:306852 USPTFULL

TITLE: BIS (thio-hydrazide amide) salts for treatment of cancers

INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES

Sun, Lijun, Harvard, MA, UNITED STATES

Kostik, Elena, Arlington, MA, UNITED STATES

Vaghefi, Farid, Watertown, MA, UNITED STATES

Chen, Shoujun, Bedford, MA, UNITED STATES

Taitsu, Noriaki, Lexington, MA, UNITED STATES

Liang, Guiping, Concord, MA, UNITED STATES

Inoue, Takayo, Malden, MA, UNITED STATES

Xia, Zhi-Qiang, Acton, MA, UNITED STATES

PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., Lexington, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080269340	A1	20081030

APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation of Ser. No. US 2003-157213, filed on 20 Jun 2005, Pat. No. US 7385084

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-582596P	20040623 (60)
	US 2005-681368P	20050516 (60)

DOCUMENT TYPE:

FILE SEGMENT:

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US

NUMBER OF CLAIMS: 15  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 24 Drawing Page(s)  
LINE COUNT: 1678

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are bis(thio-hydrazide amide) disalts, which are represented by Structural Formula (I):

##STR1##

Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group. R.sub.1-R.sub.4 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. Z is --O or --S. M.sup.+ is a pharmaceutically acceptable monovalent cation and M.sup.2+ is a pharmaceutically acceptable divalent cation.

Also, disclosed are pharmaceutical compositions comprising a bis(thio-hydrazide amide) disalt described above. Further disclosed are methods of treating a subject with cancer. The methods comprise the step of administering an effective amount of a bis(thio-hydrazide amide) disalt described above.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 11 OF 41 USPATFULL on STN  
ACCESSION NUMBER: 2008:259949 USPATFULL  
TITLE: Treating melanoma with bis(thiohydrazide amides)  
INVENTOR(S): McLeod, Matthew, Boston, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080226588	A1	20080918
APPLICATION INFO.:			

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-838977P	20060821 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	69	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	2146	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are methods of treating lentigo maligna, superficial spreading malignant melanoma, acral lentiginous malignant melanoma or nodular malignant melanoma with bis(thio-hydrazide amides) represented by a formula selected from structural formulas (i)-(ix) or pharmaceutically acceptable salts thereof, pharmaceutical compositions comprising these bis(thio-hydrazide amides) and compositions comprising these bis(thiohydrazide)amides and one or more anti-cancer agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 41 USPATFULL on STN  
ACCESSION NUMBER: 2008:201866 USPATFULL  
TITLE: Treating melanoma with BIS(THIOHYDRAZIDE AMIDES)  
INVENTOR(S): Williams, Martin, Cambridge, MA, UNITED STATES  
McLeod, Matthew, Boston, MA, UNITED STATES  
Koya, Keizo, Chestnut Hill, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080176828	A1	20080724
APPLICATION INFO.:			

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-838986P	20060821 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	

NUMBER OF CLAIMS: 52  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 1 Drawing Page(s)  
LINE COUNT: 2035  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Disclosed herein are methods of preventing or delaying the recurrence of melanoma in a subject with bis(thio-hydrazide amides) represented by a formula selected from Structural Formulas (I)-(IX) or pharmaceutically acceptable salts thereof, pharmaceutical compositions comprising these bis(thio-hydrazide amides) and compositions comprising these bis(thiohydrazide)amides and one or more anti-cancer agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 41 USPATFULL on STN  
ACCESSION NUMBER: 2008:168183 USPATFULL  
TITLE: Purification of bis (thiohydrazide amides)  
INVENTOR(S): Chen, Shoujun, Bedford, MA, UNITED STATES  
Xia, Zhi-Qiang, Acton, MA, UNITED STATES  
Kostik, Elena I., Arlington, MA, UNITED STATES  
Koya, Keizo, Chestnut Hill, MA, UNITED STATES  
Sun, Lijun, Harvard, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080146842	A1	20080619
APPLICATION INFO.:	US 2007-901265	A1	20070914 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-844776P	20060915 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	

NUMBER OF CLAIMS: 30  
EXEMPLARY CLAIM: 1  
LINE COUNT: 1034  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Disclosed herein are methods of purifying a bis(thio-hydrazide amides) compounds of the following structural formula:

##STR1##

wherein R.sub.1, R.sub.2, R.sub.3, R.sub.4, R.sub.7, R.sub.8, Z, and Y are defined herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 14 OF 41 USPATFULL on STN  
ACCESSION NUMBER: 2008:137371 USPATFULL  
TITLE: Combination with Bis(thiohydrazide amides) for treating cancer  
INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080119440	A1	20080522
APPLICATION INFO.:			

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-841570P	20060831 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	3983	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are methods of treating a proliferative disease, such as cancer, with bis(thio-hydrazide amides) or a tautomer, pharmaceutically acceptable salt, solvate, clathrate, or prodrug thereof, in combination with hyperthermia treatment. Also disclosed are methods of treating a proliferative disease, such as cancer, with bis(thio-hydrazide amides) or a tautomer, pharmaceutically acceptable salt, solvate, clathrate, or prodrug thereof, in combination with radiotherapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 15 OF 41 USPATFULL on STN  
ACCESSION NUMBER: 2008:136493 USPATFULL  
TITLE: Bis(thiohydrazide amides) formulation  
INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20080118562	A1	20080522
APPLICATION INFO.:	US 2007-900201	A1	20070910 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-843941P	20060911 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	60	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2850	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are compositions and methods useful for the in vivo

delivery bis(thiohydrazide amides), encased in a polymeric biocompatible shell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 16 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:1017205 CAPLUS

DOCUMENT NUMBER: 149:282666

TITLE: Elesclomol induces cancer cell apoptosis through oxidative stress

AUTHOR(S): Kirshner, Jessica R.; He, Suqin; Balasubramanyam, Vishwasenani; Kepros, Jane; Yang, Chin-Yu; Zhang, Mei; Du, Zhenjian; Barsoum, James; Bertin, John

CORPORATE SOURCE: Synta Pharmaceuticals Corp., Lexington, MA, 02421, USA

SOURCE: Molecular Cancer Therapeutics (2008), 7(8), 2319-2327

CODEN: MCTOCF; ISSN: 1535-7163

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Elesclomol (formerly STA-4783) is a novel small mol. undergoing clin. evaluation in a pivotal phase III melanoma trial (SYMMETRY). In a phase II randomized, double-blinded, controlled, multi-center trial in 81 patients with stage IV metastatic melanoma, treatment with elesclomol plus paclitaxel showed a statistically significant doubling of progression-free survival time compared with treatment with paclitaxel alone. Although elesclomol displays significant therapeutic activity in the clinic, the mechanism underlying its anticancer activity has not been defined previously. Here, we show that elesclomol induces apoptosis in cancer cells through the induction of oxidative stress. Treatment of cancer cells in vitro with elesclomol resulted in the rapid generation of reactive oxygen species (ROS) and the induction of a transcriptional gene profile characteristic of an oxidative stress response. Inhibition of oxidative stress by the antioxidant N-acetylcysteine blocked the induction of gene transcription by elesclomol. In addition, N-acetylcysteine blocked drug-induced apoptosis, indicating that ROS generation is the primary mechanism responsible for the proapoptotic activity of elesclomol. Excessive ROS production and elevated levels of oxidative stress are critical biochem. alterations that contribute to cancer cell growth. Thus, the induction of oxidative stress by elesclomol exploits this unique characteristic of cancer cells by increasing ROS levels beyond a threshold that triggers cell death. [Mol Cancer Ther 2008;7(8):2319-27].

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:1090061 CAPLUS

DOCUMENT NUMBER: 149:439178

TITLE: Mitochondrial drugs

AUTHOR(S): Toogood, Peter L.

CORPORATE SOURCE: Lycera Corporation, Ann Arbor, MI, 48103, USA

SOURCE: Current Opinion in Chemical Biology (2008), 12(4), 457-463

CODEN: COCBF4; ISSN: 1367-5931

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Mitochondria are cellular organelles that perform pivotal functions essential for ATP production, homeostasis, and metabolism. Moreover, mitochondria are integral to a variety of cell death and survival pathways. These roles identify mitochondria as a potential target for drugs to treat metabolic and hyperproliferative diseases. Differences in



the redox state of pathogenic vs. non-pathogenic cells may be exploited to achieve selective anti-proliferative and cytotoxic activity against target cell populations. Pro-oxidant drugs, such as Trisenox and Elesclomol, are demonstrating clin. utility in the treatment of cancer. Results obtained with Bz-423 in mice demonstrate the potential for mitochondria-targeted drugs to control disorders of immune function. Research associating an elevated oxidant state with mitochondrial damage, degenerative disease, and aging dictates the need for a better understanding of when and how pharmacol. manipulation of mitochondrial function provides most therapeutic benefit.

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 18 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:649351 CAPLUS

DOCUMENT NUMBER: 149:118288

TITLE: Elesclomol: apoptosis inducer inducer of oxidative stress HSP70 inducer oncolytic

AUTHOR(S): Revill, P.; Mealy, N.; Serradell, N.; Rosa, E.; Bolos, J.

CORPORATE SOURCE: Prous Science, Barcelona, 08025, Spain

SOURCE: Drugs of the Future (2008), 33(4), 310-315

CODEN: DRFUD4; ISSN: 0377-8282

PUBLISHER: Prous Science

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Elesclomol (STA-4783) is a small mol. that induces apoptosis via the mitochondrial apoptotic pathway in cancer cells by increasing oxidative stress, while having little or no effect on normal cells. The agent acts synergistically with established chemotherapeutic agents, including paclitaxel, to eradicate tumors in a range of human tumor xenograft models. Combination of elesclomol and paclitaxel was associated with little toxicity above that seen with paclitaxel alone in preclin. models and in a phase I trial. In a phase II trial in patients with metastatic melanoma, treatment with elesclomol in combination with paclitaxel doubled the mean progression-free survival relative to treatment with paclitaxel alone. Elesclomol is undergoing a phase III trial in combination with paclitaxel in patients with metastatic melanoma and it was recently awarded both orphan drug and fast track designations for this indication by the FDA. Addnl., the agent is being assessed in combination with paclitaxel and carboplatin in a phase I/II trial in patients with stage IIIB/IV non-small cell lung cancer (NSCLC).

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 19 OF 41 USPATFULL on STN

ACCESSION NUMBER: 2007:101208 USPATFULL

TITLE: Bis(thio-hydrazide amide) formulation

INVENTOR(S): Lunsman, Walter J., Harvard, MA, UNITED STATES

Deshpanday, Ninad, Cary, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20070088057	A1	20070419
APPLICATION INFO.:	US 2006-502590	A1	20060810 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-708977P	20050816 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA  
ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US

NUMBER OF CLAIMS: 86  
EXEMPLARY CLAIM: 1  
LINE COUNT: 2169

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are compositions comprising a compound represented by structural formula (I): ##STR1## 2 g of which is reconstitutable in 10 mL of a water in less than 10 minutes, and methods for preparing these compositions. Also disclosed are compositions comprising a compound represented by structural formula (I) and a pharmaceutically acceptable excipient, wherein the molar ratio of said compound to said excipient is from 1:20 to 1:1, and methods for preparing these compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 20 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:87076 CAPLUS

DOCUMENT NUMBER: 146:330123

TITLE: Phase I clinical trial of STA-4783 in combination with paclitaxel in patients with refractory solid tumors

AUTHOR(S): Berkenblit, Anna; Eder, Joseph P., Jr.; Ryan, David P.; Seiden, Michael V.; Tatsuta, Noriaki; Sherman, Matthew L.; Dahl, Thomas A.; Dezuze, Bruce J.; Supko, Jeffrey G.

CORPORATE SOURCE: Beth Israel Deaconess Medical Center, Boston, MA, USA  
SOURCE: Clinical Cancer Research (2007), 13(2, Pt. 1), 584-590  
CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

AB STA-4783 is a new compound that markedly enhances the therapeutic index of paclitaxel against human tumor xenograft models. A phase I clin. trial was undertaken to determine the maximum tolerated dose, toxicity profile, and pharmacokinetics of STA-4783 in combination with paclitaxel. Adults with refractory solid tumors concurrently received STA-4783 and paclitaxel as a 3-h i.v. infusion at starting doses of 44 and 135 mg/m<sup>2</sup>, resp. After increasing paclitaxel to 175 mg/m<sup>2</sup>, the STA-4783 dose was escalated as permitted by dose-limiting toxicity during the first 21-day cycle. Thirty-five patients were treated with eight dose levels of STA-4783/paclitaxel. In patients receiving 175 mg/m<sup>2</sup> paclitaxel, the incidence of severe toxicity increased with escalation of the STA-4783 dose above 263 mg/m<sup>2</sup>, and 438 mg/m<sup>2</sup> was the maximum tolerated dose. All toxicities were typical of paclitaxel, with neutropenia, mucositis, and myalgia/arthralgia being dose limiting. Partial responses were achieved in one patient with Kaposi's sarcoma and another with ovarian cancer that progressed during prior treatment with paclitaxel. STA-4783 exhibited linear pharmacokinetics characterized by rapid elimination from plasma (biol. half-life, 1.06 ± 0.24 h) and a low steady-state apparent volume of distribution (25.1 ± 8.1 L/m<sup>2</sup>). The total body clearance of paclitaxel decreased significantly with escalation of the STA-4783 dose. The STA-4783/paclitaxel combination was well tolerated with a toxicity profile similar to single-agent paclitaxel. Enhanced systemic exposure to paclitaxel resulting from a dose-dependent interaction with STA-4783 was associated with increased toxicity. Objective responses in two heavily pretreated patients, both with taxane exposure, have encouraged further clin. evaluation of this regimen.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 21 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:1122626 CAPLUS  
 DOCUMENT NUMBER: 145:449186  
 TITLE: Combination cancer therapy with  
 bis(thiohydrazide) amide compounds and taxanes  
 INVENTOR(S): Dahl, Thomas A.; McLeod, Matthew  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 63pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006113695	A1	20061026	WO 2006-US14531	20060413
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM AU 2006236378 A1 20061026 AU 2006-236378 20060413 CA 2604907 A1 20061026 CA 2006-2604907 20060413 EP 1877048 A1 20080116 EP 2006-750538 20060413 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU JP 2008536875 T 20080911 JP 2008-506821 20060413 MX 200712688 A 20080314 MX 2007-12688 20071012 PRIORITY APPLN. INFO.: US 2005-672139P P 20050415 WO 2006-US14531 W 20060413				

OTHER SOURCE(S): MARPAT 145:449186

AB A method of treating a subject with cancer includes co-administering to the subject over 3-5 wk, a taxane in an amount of between about 243-315  $\mu\text{mol}/\text{m}^2$  (e.g., equivalent to paclitaxel in about 210-270 mg/m<sup>2</sup>); and a bis(thiohydrazide amide) in an amount between about 1473-1722  $\mu\text{mol}/\text{m}^2$ . (e.g. PhC(S)N(Me)NHC(O)CH<sub>2</sub>C(O)NHN(Me)C(S)Ph in about 590-690 mg/m<sup>2</sup>). The bis(thiohydrazide amide) is represented by R1C(S)N(R3)N(R7)C(Z)YC(Z)N(R8)N(R4)C(S)R2 [Y = covalent bond, (un)substituted straight chain hydrocarbyl, or C(Z)YC(Z) forms (un)substituted aromatic group; R1-R4 = H, (un)substituted aliphatic group, (un)substituted aryl group, etc.; R7, R8 = H, (un)substituted aliphatic group, (un)substituted aryl group; Z = O, S].

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 22 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:1123448 CAPLUS  
 DOCUMENT NUMBER: 145:449209  
 TITLE: Methods of increasing natural killer cell activity for therapy  
 INVENTOR(S): Barsoum, James; Du, Zhenjian  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 66pp.

DOCUMENT TYPE: CODEN: PIXXD2  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: English  
 PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006113572	A1	20061026	WO 2006-US14320	20060413
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006236534	A1	20061026	AU 2006-236534	20060413
CA 2603314	A1	20061026	CA 2006-2603314	20060413
EP 1871350	A1	20080102	EP 2006-750374	20060413
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008536870	T	20080911	JP 2008-506798	20060413
PRIORITY APPLN. INFO.:			US 2005-671910P	P 20050415
			WO 2006-US14320	W 20060413

OTHER SOURCE(S): MARPAT 145:449209

AB Methods of employing bis(thio-hydrazide amides) to increase natural killer (NK) cell activity in a subject in need thereof, e.g., a subject with an infection or an immunodeficiency, are provided such that the disorder is not cancer, a proliferative cell disorder, a non-infective heat shock protein 70 (Hsp70) responsive disorder, or a proteasome-inhibitor responsive disorder. Typically, a subject, e.g., a human, can be in need of increased NK cell activity has an immunodeficiency or is treated for an infection (e.g., a bacterial, viral, fungal, or parasite infection, or a combination thereof). The method includes administering to the subject an effective amount of a compound represented by  $R1(C:S)NR3NR7(C:Z)Y(C:Z)NR8NR4(C:S)R2$  where Y is a covalent bond or an optionally substituted straight chained hydrocarbyl group, or Y, taken together with both >C=Z groups to which it is bonded, is an optionally substituted aromatic group; R1-R4 are independently -H, an optionally substituted aliphatic group, an optionally substituted aryl group, or R1 and R3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R2 and R4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring; R7-R8 are independently -H, an optionally substituted aliphatic group, or an optionally substituted aryl group; Z is O or S.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 23 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1124931 CAPLUS

DOCUMENT NUMBER: 145:449193

TITLE: Natural killer cell activity-based methods for determining prognosis for patients undergoing cancer therapy

INVENTOR(S): Barsoum, James; Du, Zhenjian; Dahl, Thomas A.; McLeod,

PATENT ASSIGNEE(S): Matthew  
 Synta Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 82pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006113493	A2	20061026	WO 2006-US14186	20060413
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: US 2005-671833P P 20050415

OTHER SOURCE(S): MARPAT 145:449193

AB A method of determining a prognosis for a subject undergoing cancer therapy with an agent that activates heat shock protein 70 (Hsp70) includes comparing natural killer (NK) cell activity in a test sample with NK cell activity in a control sample. The control sample can be taken from the subject before dosing with the agent and the test sample can be taken from the subject after dosing with the agent. An increase in NK cell activity in the test sample compared with the control sample can indicate an improved prognosis.

L5 ANSWER 24 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:578381 CAPLUS  
 DOCUMENT NUMBER: 145:55981  
 TITLE: Compounds acting at the centrosome  
 INVENTOR(S): Zhang, Mei; Ladanyi, Andras  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 132 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006062732	A2	20060615	WO 2005-US42268	20051118
WO 2006062732	A3	20070208		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,			

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM  
 US 20060167106 A1 20060727 US 2005-283570 20051118  
 PRIORITY APPLN. INFO.: US 2004-629858P P 20041119

OTHER SOURCE(S): MARPAT 145:5981

AB The present invention relates to compds., and methods utilizing compds., which exhibit one or more of the following properties: (i) disrupts organization of an actin cytoskeleton of a cell; (ii) disrupts organization of a microtubule network of a cell; (iii) induces accumulation of tubulin at centrosomes but does not induce accumulation of tubulin in a nucleus of a cell; (iv) induces accumulation of tubulin at centrosomes at a concentration of 500 nM or less within four hours; (v) induces accumulation of Hsp70 and has weak-to-moderate proteasome inhibitory activity; and (vi) does not have proteasome inhibitory activity when assayed on purified proteasomes.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 25 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:494013 CAPLUS

DOCUMENT NUMBER: 145:1005

TITLE: Bis(thio-hydrazide amides) for increasing Hsp70 expression

INVENTOR(S): Barsoum, James

PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006055747	A2	20060526	WO 2005-US41750	20051117
WO 2006055747	A3	20061005		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005306471	A1	20060526	AU 2005-306471	20051117
CA 2587598	A1	20060526	CA 2005-2587598	20051117
US 20060142386	A1	20060629	US 2005-281923	20051117
EP 1827410	A2	20070905	EP 2005-824349	20051117
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008520697	T	20080619	JP 2007-543254	20051117
PRIORITY APPLN. INFO.:				
			US 2004-629595P	P 20041119
			WO 2005-US41750	W 20051117

OTHER SOURCE(S): MARPAT 145:1005

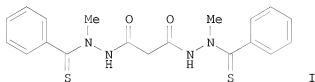
AB The present invention discloses a method of treating a Hsp70-responsive disorder by which a subject is administered an effective amount of a Bis(thio-hydrazide amide) compound

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 26 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2006:295255 CAPLUS  
DOCUMENT NUMBER: 144:343554  
TITLE: Bis(thiohydrazide amides) for treatment of hyperplasia  
INVENTOR(S): Vaghefi, Farid; Chen, Lan Bo; Sherman, Matthew L.  
PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
SOURCE: PCT Int. Appl., 104 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006033913	A2	20060330	WO 2005-US32717	20050914
WO 2006033913	A3	20060504		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20060142393	A1	20060629	US 2005-226929	20050914
PRIORITY APPLN. INFO.:			US 2004-610270P	P 20040916
OTHER SOURCE(S):	MARPAT 144:343554			

GI



AB Methods and medical devices for treating a proliferative disorder in a subject, e.g., restenosis in a blood vessel that has been implanted with a stent, employ a bis(thiohydrazide amide). I showed more effective activity against multidrug resistant cell lines than taxol and vincristine.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 27 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2006:75829 CAPLUS  
DOCUMENT NUMBER: 144:170795  
TITLE: Preparation of bis(thiohydrazide amide) salts for treatment of cancer  
INVENTOR(S): Kostik, Elena; Vaghefi, Farid; Liang, Guiqing; Koya, Keizo; Sun, Lijun; Tatsuta, Noriaki; Chen, Shoujun;

PATENT ASSIGNEE(S): Inoue, Takayo; Xia, Zhi-Qiang  
 SOURCE: Synta Pharmaceuticals Corp., USA  
 PCT Int. Appl., 101 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION: Terminal Disclaimer Filed and Approved

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006009940	A1	20060126	WO 2005-US21642	20050620
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005265202	A1	20060126	AU 2005-265202	20050620
CA 2570698	A1	20060126	CA 2005-2570698	20050620
US 20060135595	A1	20060622	US 2005-157213	20050620
EP 1781604	A1	20070309	EP 2005-762347	20050620
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
CN 1993318	A	20070704	CN 2005-80026445	20050620
JP 2008504264	T	20080214	JP 2007-518152	20050620
BR 2005012526	A	20080311	BR 2005-12526	20050620
IN 2007DN00172	A	20070803	IN 2007-DN172	20070108
NO 2007000378	A	20070316	NO 2007-378	20070119
KR 2007029259	A	20070313	KR 2007-701513	20070122
US 20080269340	A1	20081030	US 2008-148312	20080418
PRIORITY APPLN. INFO.:			US 2004-582596P	P 20040623
			US 2005-681368P	P 20050516
			US 2005-157213	A1 20050620
			WO 2005-US21642	W 20050620

OTHER SOURCE(S): MARPAT 144:170795  
 AB R1CSNR3N:C(Z-)YC(Z-):NNR4CSR2.ZM+ [Y = bond, (substituted) hydrocarbylene; R1-R4 = H, (substituted) aliphatic, aryl; R1R3, R2R4 = atoms to form non-aromatic heterocyclic ring optionally fused to aromatic ring; Z = O, S; M+

pharmaceutically acceptable cation], were prepared Thus, (PhCSNMeNHC(O)2CH2 was added to aqueous NaOH followed by freeze drying to give [PhCSNMeN:C(ONa)]2CH2. The latter showed H2O soly of >1000 mg/mL.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 28 OF 41 USPATFULL ON STN  
 ACCESSION NUMBER: 2006:328606 USPATFULL  
 TITLE: Synthesis of taxol enhancers  
 INVENTOR(S): Chen, Shoujun, Billerica, MA, UNITED STATES  
 Sun, Lijun, Harvard, MA, UNITED STATES  
 Xia, Zhi-Qiang, Dedham, MA, UNITED STATES  
 Koya, Keizo, Brookline, MA, UNITED STATES  
 Ono, Mitsunori, Lexington, MA, UNITED STATES



	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060281811	A1	20061214
	US 7435843	B2	20081014
APPLICATION INFO.:	US 2006-440429	A1	20060524 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2004-807919, filed on 24 Mar 2004, GRANTED, Pat. No. US 7074952 Continuation of Ser. No. US 2002-193076, filed on 10 Jul 2002, GRANTED, Pat. No. US 6825235		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-304318P	20010710 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	2	
EXEMPLARY CLAIM:	1	
LINE COUNT:	867	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of preparing a thiohydrazide product compound from a hydrazide starting compound. The hydrazide starting compound is represented by Structural Formula (I): ##STR1## The thiohydrazide product compound is represented by Structural Formula (II): ##STR2## In Structural Formulas (I)-(II), R.sub.1 and R.sub.2 are independently an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.2 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. When R.sub.2 is an aryl group or a substituted aryl group, then R.sub.5 is a hydrazine protecting group; and when R.sub.2 is an aliphatic or substituted aliphatic group, then R.sub.5 is --H or a hydrazine protecting group. R.sub.10 is --H or a substituted or unsubstituted alkyl group. The method comprising the step of reacting the starting compound with a thionylating reagent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 29 OF 41 USPATFULL on STN  
 ACCESSION NUMBER: 2006:316090 USPATFULL  
 TITLE: Synthesis of bis(thio-hydrazide amide) salts  
 INVENTOR(S): Chen, Shoujun, Bedford, MA, UNITED STATES  
 Xia, Zhi-Qiang, Acton, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060270873	A1	20061130
APPLICATION INFO.:	US 2006-432307	A1	20060511 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-681263P	20050516 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	33	
EXEMPLARY CLAIM:	1	
LINE COUNT:	790	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of preparing a bis(thio-hydrazide amide) disalt includes the steps of combining a neutral bis(thio-hydrazide amide), an organic solvent and a base to form a bis(thio-hydrazide amide) solution; and combining the solution and methyl tert-butyl ether, thereby precipitating a disalt of the bis(thio-hydrazide amide). In some embodiments, a method of preparing a bis(thio-hydrazide amide) disalt includes the steps of combining a neutral bis(thio-hydrazide amide) and an organic solvent selected from methanol, ethanol, acetone, and methyl ethyl ketone to make a mixture; adding at least two equivalents of a base selected from sodium hydroxide, potassium hydroxide, sodium methoxide, potassium methoxide, sodium ethoxide and potassium ethoxide to the mixture, thereby forming a solution; and combining the solution and methyl tert-butyl ether to precipitate the disalt of the bis(thio-hydrazide amide). The disclosed methods do not require lyophilization and the solvents used in the process can be more readily removed to low levels consistent with pharmaceutically acceptable preparation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 30 OF 41 USPTAFULL on STN  
ACCESSION NUMBER: 2006:196350 USPTAFULL  
TITLE: Compounds acting at the centrosome  
INVENTOR(S): Zhang, Mei, Lexington, MA, UNITED STATES  
Ladanyi, Andras, Budapest, HUNGARY

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060167106	A1	20060727
APPLICATION INFO.:	US 2005-283570	A1	20051118 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-629858P	20041119 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	49	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	40 Drawing Page(s)	
LINE COUNT:	3241	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compounds, and methods utilizing compounds, which exhibit one or more of the following properties: i) disrupts organization of an actin cytoskeleton of a cell; ii) disrupts organization of a microtubule network of a cell; iii) induces accumulation of tubulin at centrosomes but does not induce accumulation of tubulin in a nucleus of a cell; iv) induces accumulation of tubulin at centrosomes at a concentration of 500 nM or less within four hours; v) induces accumulation of Hsp70 and has weak-to-moderate proteasome inhibitory activity; and vi) does not have proteasome inhibitory activity when assayed on purified proteasomes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 31 OF 41 USPTAFULL on STN  
ACCESSION NUMBER: 2006:167882 USPTAFULL  
TITLE: Bis(thio-hydrazide amides) for treatment of hyperplasia  
INVENTOR(S): Sherman, Matthew L., Newton, MA, UNITED STATES  
Vaghefi, Farid, Burlington, MA, UNITED STATES  
Chen, Lan Bo, Lexington, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060142393	A1	20060629
APPLICATION INFO.:	US 2005-226929	A1	20050914 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-610270P	20040916 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	44	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	2506	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and medical devices for treating a proliferative disorder in a subject, e.g., restenosis in a blood vessel that has been implanted with a stent, employ a bis(thio-hydrazide amide) represented by Structural Formula I or a pharmaceutically acceptable salt or solvate thereof.

##STR1## Y is a covalent bond or an optionally substituted straight chained hydrocarbaryl group, or, Y, taken together with both >C=Z groups to which it is bonded, is an optionally substituted aromatic group.

R.sub.1-R.sub.4 are independently --H, an optionally substituted aliphatic group, an optionally substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring.

R.sub.7-R.sub.8 are independently --H, an optionally substituted aliphatic group, or an optionally substituted aryl group. Z is O or S.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 32 OF 41 USPATFULL on STN

ACCESSION NUMBER: 2006:167875 USPATFULL

TITLE: Bis(thio-hydrazide amides) for increasing Hsp70 expression

INVENTOR(S): Barsoum, James, Lexington, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060142386	A1	20060629
APPLICATION INFO.:	US 2005-281923	A1	20051117 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-629595P	20041119 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	51	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	1873	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating a Hsp70-responsive disorder in a subject includes

administering to the subject an effective amount of a compound represented by Structural Formula I, or a pharmaceutically acceptable salt or solvate thereof. ##STR1## Y is a covalent bond or an optionally substituted straight chained hydrocarbyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is an optionally substituted aromatic group.

R.sub.1-R.sub.4 are independently --H, an optionally substituted aliphatic group, an optionally substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring.

R.sub.7-R.sub.8 are independently --H, an optionally substituted aliphatic group, or an optionally substituted aryl group. Z is O or S.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 33 OF 41 USPATFULL on STN  
ACCESSION NUMBER: 2006:160058 USPATFULL  
TITLE: Bis(thio-hydrazide amide) salts for treatment of cancers  
INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES  
Sun, Lijun, Harvard, MA, UNITED STATES  
Kostik, Elena, Arlington, MA, UNITED STATES  
Vaghefi, Farid, Burlington, MA, UNITED STATES  
Chen, Shoujun, Bedford, MA, UNITED STATES  
Tatsuta, Noriaki, Lexington, MA, UNITED STATES  
Liang, Guiqing, Concord, MA, UNITED STATES  
Inoue, Takayo, Malden, MA, UNITED STATES  
Xia, Zhi-Qiang, Acton, MA, UNITED STATES  
PATENT ASSIGNEE(S): Synta Pharmaceuticals, Lexington, MA, UNITED STATES  
(U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20060135595	A1	20060622	TD Filed and Approved
APPLICATION INFO.:	US 2005-157213	A1	20050620	(11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-582596P	20040623 (60)
	US 2005-681368P	20050516 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US	
NUMBER OF CLAIMS:	31	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	24 Drawing Page(s)	
LINE COUNT:	2028	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are bis(thio-hydrazide amide) disalts, which are represented by Structural Formula (I): ##STR1##

Y is a covalent bond or a substituted or unsubstituted straight chained hydrocarbyl group. R.sub.1-R.sub.4 are independently --H, an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.3 taken together with the carbon and nitrogen atoms to which they are bonded, and/or R.sub.2 and R.sub.4

taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. Z is --O or --S. M.sup.+ is a pharmaceutically acceptable monovalent cation and M.sup.2+ is a pharmaceutically acceptable divalent cation. Also, disclosed are pharmaceutical compositions comprising a bis(thio-hydrazide amide) disalt described above. Further disclosed are methods of treating a subject with cancer. The methods comprise the step of administering an effective amount of a bis(thio-hydrazide amide) disalt described above.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 34 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:658982 CAPLUS  
 DOCUMENT NUMBER: 145:465053  
 TITLE: Drug evaluation: STA-4783 - enhancing taxane efficacy by induction of Hsp70  
 AUTHOR(S): Gehrmann, Mathias  
 CORPORATE SOURCE: Dept Hematology/Oncology Molecular Oncology, University Hospital Regensburg, Regensburg, D-93053, Germany  
 SOURCE: Current Opinion in Investigational Drugs (Thomson Scientific) (2006), 7(6), 574-580  
 CODEN: COIDAZ; ISSN: 1472-4472  
 PUBLISHER: Thomson Scientific  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English  
 AB A review. The apoptosis stimulator STA-4783 acts by inducing expression of heat shock protein (Hsp)70 on tumor cell surfaces and disrupting the cytoskeletal network. Currently in development by Synta Pharmaceuticals for the potential treatment of solid tumors, phase II clin. trials in non-small-cell lung cancer, melanoma and sarcoma have been initiated.  
 REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 35 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:633518 CAPLUS  
 DOCUMENT NUMBER: 141:173877  
 TITLE: A preparation of malonyl dihydrazide derivatives, useful for the treatment of multi-drug resistant cancer  
 INVENTOR(S): Koya, Keizo; Sun, Lijun; Wu, Yaming; Korbut, Timoty; Zhou, Dan; Du, Zhenjian; Chen, Shoujun; Tatsuta, Noriaki; Liang, Guiqing; Ono, Mitsunori  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 113 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004064826	A1	20040805	WO 2004-US1089	20040115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
AU 2004206865	A1	20040805	AU 2004-206865	20040115
AU 2004206865	B2	20060713		

CA 2512797	A1	20040805	CA 2004-2512797	20040115
US 20040225016	A1	20041111	US 2004-758589	20040115
EP 1583524	A1	20051012	EP 2004-702560	20040115
EP 1583524	B1	20060823		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

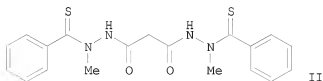
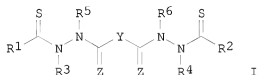
JP 2006515626	T	20060601	JP 2006-500976	20040115
AT 336991	T	20060915	AT 2004-702560	20040115
ES 2271839	T3	20070416	ES 2004-702560	20040115
HK 1084024	A1	20070119	HK 2006-104252	20060407
AU 2006228035	A1	20061102	AU 2006-228035	20061011

PRIORITY APPLN. INFO.:

US 2003-440406P	P	20030115
AU 2004-206865	A3	20040115
WO 2004-US1089	W	20040115

OTHER SOURCE(S): MARPAT 141:173877

GI



AB One embodiment of the present invention is a method of treating a subject with a multi-drug resistant cancer. The method comprises administering to the subject an effective amount of a compound represented by formula I [wherein: Y is a covalent bond or (un)substituted straight chained hydrocarbyl group, or, Y, taken together with both >C=Z groups to which it is bonded, is (un)substituted aromatic group; R1-R4 are independently H, aliphatic group, substituted aliphatic group, or aryl group, etc.; R5 and R6 are independently H, aliphatic group, substituted aliphatic group, (un)substituted aryl group; Z is O or S]. For instance, malonyl dihydrazide derivative II (IC50 = 0.005  $\mu$ M, multi-drug cell line MES-SA/DX5) was prepared via amidation of malonic acid by PhC(:S)N(Me)NH2 with a yield of 80% (example 4).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 36 OF 41 USPATFULL on STN  
 ACCESSION NUMBER: 2004:292863 USPATFULL  
 TITLE: Synthesis of taxol enhancers  
 INVENTOR(S): Chen, Shoujun, Billerica, MA, UNITED STATES  
 Sun, Lijun, Harvard, MA, UNITED STATES  
 Xia, Zhi-Qiang, Dedham, MA, UNITED STATES  
 Koya, Keizo, Brookline, MA, UNITED STATES  
 Ono, Mitsunori, Lexington, MA, UNITED STATES  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., Lexington, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20040229952	A1	20041118
	US 7074952	B2	20060711
APPLICATION INFO.:	US 2004-807919	A1	20040324 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-193076, filed on 10 Jul 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-304318P	20010710 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1	
LINE COUNT:	990	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of preparing a thiohydrazide product compound from a hydrazide starting compound. The hydrazide starting compound is represented by Structural Formula (I): ##STR1##

The thiohydrazide product compound is represented by Structural Formula (II): ##STR2##

In Structural Formulas (I)-(II), R.sub.1 and R.sub.2 are independently an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.2 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. When R.sub.2 is an aryl group or a substituted aryl group, then R.sub.5 is a hydrazine protecting group; and when R.sub.2 is an aliphatic or substituted aliphatic group, then R.sub.5 is --H or a hydrazine protecting group. R.sub.10 is --H or a substituted or unsubstituted alkyl group. The method comprising the step of reacting the starting compound with a thionylating reagent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 37 OF 41 USPATFULL on STN  
 ACCESSION NUMBER: 2004:286848 USPATFULL  
 TITLE: Treatment for cancers  
 INVENTOR(S): Koya, Keizo, Chestnut Hill, MA, UNITED STATES  
 Sun, Lijun, Harvard, MA, UNITED STATES  
 Wu, Yaming, Lexington, MA, UNITED STATES  
 Korbut, Timothy, Brighton, MA, UNITED STATES  
 Zhou, Dan, Lexington, MA, UNITED STATES  
 Du, Zhenjian, Northborough, MA, UNITED STATES  
 Chen, Shoujun, Bedford, MA, UNITED STATES  
 Tatsuta, Noriaki, Lexington, MA, UNITED STATES  
 Liang, Guiqing, Concord, MA, UNITED STATES  
 Ono, Mitsunori, Lexington, MA, UNITED STATES  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corporation, Lexington, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20040225016	A1	20041111
APPLICATION INFO.:	US 2004-758589	A1	20040115 (10)

NUMBER	DATE
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PRIORITY INFORMATION: US 2003-440406P 20030115 (60)  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA  
 ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133  
 NUMBER OF CLAIMS: 35  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 7 Drawing Page(s)  
 LINE COUNT: 2511  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB One embodiment of the present invention is a method of treating a  
 subject with a multi-drug resistant cancer. The method  
 comprises administering to the subject an effective amount of a compound  
 represented by Structural Formula (I): ##STR1##

Y is a covalent bond or a substituted or unsubstituted straight chained  
 hydrocarbyl group, or, Y, taken together with both >C=Z groups to which  
 it is bonded, is a substituted or unsubstituted aromatic group.

R.sub.1-R.sub.4 are independently --H, an aliphatic group, a substituted  
 aliphatic group, an aryl group or a substituted aryl group, or R.sub.1  
 and R.sub.3 taken together with the carbon and nitrogen atoms to which  
 they are bonded, and/or R.sub.2 and R.sub.4 taken together with the  
 carbon and nitrogen atoms to which they are bonded, form a non-aromatic  
 heterocyclic ring optionally fused to an aromatic ring. Preferably  
 R.sub.1 and R.sub.2 are the same and R.sub.3 and R.sub.4 are the same.

R.sub.5-R.sub.6 are independently --H, an aliphatic group, a substituted  
 aliphatic group, an aryl group or a substituted aryl group.

Z is .dbd.O or .dbd.S.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 38 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 1  
 ACCESSION NUMBER: 2003:818151 CAPLUS  
 DOCUMENT NUMBER: 139:323341  
 TITLE: Preparation of thiobenzoylhydrazide derivatives as  
 taxol enhancers for treatment of cancer  
 INVENTOR(S): Koya, Keizo; Sun, Lijun; Chen, Shoujun; Tatsuta,  
 Noriaki; Wu, Yaming; Ono, Mitsunori  
 PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA  
 SOURCE: U.S. Pat. Appl. Publ., 63 pp., Cont.-in-part of U.S.  
 Ser. No. 193,075.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

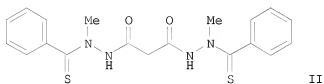
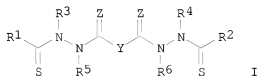
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030195258	A1	20031016	US 2003-345885	20030115
US 6924312	B2	20050802		
US 20030045518	A1	20030306	US 2002-193639	20020710
US 6762204	B2	20040713		
US 20030119914	A1	20030626	US 2002-193075	20020710
US 6800660	B2	20041005		
EP 1731148	A1	20061213	EP 2006-19066	20020710

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,  
 LI, LU, MC, NL, PT, SE, SK, TR, AL, LT, LV, MK, RO, SI



ZA 2004001051	A	20050622	ZA 2004-1051	20040209
ZA 2004001054	A	20050622	ZA 2004-1054	20040209
US 20040235909	A1	20041125	US 2004-803798	20040318
US 7001923	B2	20060221		
US 20050009920	A1	20050113	US 2004-846152	20040514
US 7037940	B2	20060502		
US 20060116374	A1	20060601	US 2005-244427	20051005
US 7368473	B2	20080506		
US 20060122183	A1	20060608	US 2005-244324	20051005
US 7345094	B2	20080318		
US 20080214655	A1	20080904	US 2008-9641	20080118
US 20080242702	A1	20081002	US 2008-77729	20080320
PRIORITY APPLN. INFO.:			US 2001-304252P	P 20010710
			US 2002-361936P	P 20020306
			US 2002-361946P	P 20020306
			US 2002-193075	A2 20020710
			US 2002-193639	A2 20020710
			EP 2002-746947	A3 20020710
			US 2004-803798	A1 20040318
			US 2004-846152	A1 20040514
			US 2005-244324	A1 20051005
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OTHER SOURCE(S): MARPAT 139:323341  
GI



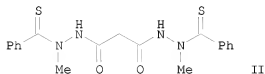
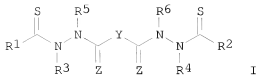
AB The title compds. I [wherein Y = a single bond, phenylene, or (un)substituted hydrocarbyl, etc.; R1 and R2 = independently (un)substituted aryl; R3-R6 = independently H, (un)substituted aliphatic group, or aryl; Z = O or S; etc.] and pharmaceutically acceptable salts thereof are prepared as taxol enhancers for treatment of cancer. For example, the compound II was prepared in a multi-step synthesis. Also disclosed is a method of treating a subject with cancer by administering to the subject a compound of I in combination with taxol or an analog of taxol. II showed synergistic anticancer activity with paclitaxel in rat.

L5 ANSWER 39 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:58057 CAPLUS  
 DOCUMENT NUMBER: 138:122398  
 TITLE: Preparation of bis(thiohydrazide) derivatives as taxol enhancer compounds  
 INVENTOR(S): Koya, Keizo; Sun, Lijun; Chen, Shoujun; Tatsuta, Noriaki; Wu, Yaming; Ono, Mitsunori  
 PATENT ASSIGNEE(S): SBR Pharmaceuticals Corp., USA  
 SOURCE: PCT Int. Appl., 105 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003006430	A1	20030123	WO 2002-US21717	20020710
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2455453	A1	20030123	CA 2002-2455453	20020710
AU 2002316626	A1	20030129	AU 2002-316626	20020710
AU 2002316626	B2	20050602		
EP 1406869	A1	20040414	EP 2002-746947	20020710
EP 1406869	B1	20060913		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002011227	A	20040810	BR 2002-11227	20020710
JP 2004534848	T	20041118	JP 2003-512202	20020710
CN 1553895	A	20041208	CN 2002-817733	20020710
CN 100348580	C	20071114		
NZ 530963	A	20050826	NZ 2002-530963	20020710
AT 339402	T	20061015	AT 2002-746947	20020710
EP 1731148	A1	20061213	EP 2006-19066	20020710
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, SK, TR, AL, LT, LV, MK, RO, SI				
ES 2271292	T3	20070416	ES 2002-746947	20020710
NO 2004000095	A	20040223	NO 2004-95	20040109
MX 2004PA00244	A	20050307	MX 2004-PA244	20040109
ZA 2004001051	A	20050622	ZA 2004-1051	20040209
ZA 2004001054	A	20050622	ZA 2004-1054	20040209
HK 1060115	A1	20061124	HK 2004-103011	20040429
US 20060116374	A1	20060601	US 2005-244427	20051005
US 7368473	B2	20080506		
US 20060122183	A1	20060608	US 2005-244324	20051005
US 7345094	B2	20080318		
US 20080214655	A1	20080904	US 2008-9641	20080118
US 20080242702	A1	20081002	US 2008-77729	20080320
PRIORITY APPLN. INFO.:			US 2001-304252P	P 20010710
			US 2002-361946P	P 20020306
			US 2002-361936P	P 20020306
			EP 2002-746947	A3 20020710
			US 2002-193075	A1 20020710
			US 2002-193639	A1 20020710
			WO 2002-US21717	W 20020710
			US 2004-803798	A1 20040318
			US 2004-846152	A1 20040514
			US 2005-244324	A1 20051005
			US 2005-244427	A3 20051005

OTHER SOURCE(S): MARPAT 138:122398  
 GI



AB Title compds. I [Y = bond, phenylene, hydrocarbyl or taken together with both >C=Z groups is aromatic; R1-2 = (un)substituted aryl; R3-4 = H, alkyl, aryl; R5-6 = H, alkyl, aryl; Z = O, with provisions] and analogs are prepared For instance, thiobenzoic acid N-methylhydrazide (preparation given) was added to malonyl dichloride to give bis-hydrazide II. The combination of example compds. and paclitaxel administered to mice with tumors (MDA-435) resulted in greater tumor reduction than either active component given alone.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 40 OF 41 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:58056 CAPLUS

DOCUMENT NUMBER: 138:122397

TITLE: Process for the preparation of bis(thiohydrazide) derivatives used as Taxol enhancers  
INVENTOR(S): Chen, Shoujun; Sun, Lijun; Xia, Zhi-Qiang; Koya, Keizo; Ono, Mitsunori

PATENT ASSIGNEE(S): SBR Pharmaceuticals Corp., USA

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

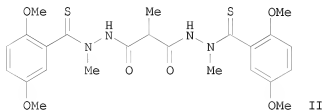
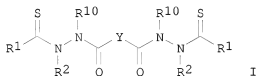
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003006429	A1	20030123	WO 2002-US21716	20020710
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
TW 252847	B	20060411	TW 2002-91115205	20020709
CA 2453415	A1	20030123	CA 2002-2453415	20020710
AU 2002316625	A1	20030129	AU 2002-316625	20020710
AU 2002316625	B2	20060525		
US 20030069225	A1	20030410	US 2002-193076	20020710
US 6825235	B2	20041130		

EP 1406868	A1	20040414	EP 2002-746946	20020710
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2004534847	T	20041118	JP 2003-512201	20020710
CN 1553893	A	20041208	CN 2002-817724	20020710
CN 100398516	C	20080702		
CN 101270069	A	20080924	CN 2008-10092868	20020710
NO 2004000053	A	20040210	NO 2004-53	20040107
MX 2004PA00245	A	20050307	MX 2004-PA245	20040109
IN 2004DN00077	A	20060224	IN 2004-DN77	20040112
US 20040229952	A1	20041118	US 2004-807919	20040324
US 7074952	B2	20060711		
US 20060281811	A1	20061214	US 2006-440429	20060524
US 7435843	B2	20081014		
AU 2006203689	A1	20060914	AU 2006-203689	20060824
PRIORITY APPLN. INFO.:			US 2001-304318P	P 20010710
			CN 2002-817724	A3 20020710
			US 2002-193076	A1 20020710
			WO 2002-US21716	W 20020710
			US 2004-807919	A1 20040324

CASREACT 138:122397; MARPAT 138:122397

OTHER SOURCE(S):  
GI



AB Disclosed is a method of preparing bis(thiohydrazide) I [R1-2 = aliphatic, aryl, etc.; R10 = H, alkyl; Y = bond, hydrocarbyl]. The method comprises reacting a hydrazide with a thionation reagent followed by reaction of the thiohydrazide with Z-C(O)-Y-C(O)-Z or HO-C(O)-Y-C(O)-OH [Z = leaving group; Y is as defined above] and a carboxylic acid activating agent to produce I. For instance, 2,5-dimethoxybenzoic acid is coupled to methylhydrazine (CH<sub>2</sub>Cl<sub>2</sub>, DCC, DMAP); the resulting hydrazide is treated with Lawesson's reagent and the product reacted with 2-methylmalonic acid (DMF, DCC) to give II. I enhance the anti-cancer activity of taxol and analogs thereof.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 41 OF 41 USPATFULL ON STN  
 ACCESSION NUMBER: 2003:100114 USPATFULL  
 TITLE: Synthesis of taxol enhancers

INVENTOR(S): Chen, Shoujun, Billerica, MA, UNITED STATES  
 Sun, Lijun, Harvard, MA, UNITED STATES  
 Xia, Zhi-Qiang, Dedham, MA, UNITED STATES  
 Koya, Keizo, Brookline, MA, UNITED STATES  
 Ono, Mitsunori, Lexington, MA, UNITED STATES  
 PATENT ASSIGNEE(S): Shionogi BioResearch Corp., Lexington, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20030069225	A1	20030410
	US 6825235	B2	20041130
APPLICATION INFO.:	US 2002-193076	A1	20020710 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-304318P	20010710 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133	
NUMBER OF CLAIMS:	60	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1181	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of preparing a thiohydrazide product compound from a hydrazide starting compound. The hydrazide starting compound is represented by Structural Formula (I): ##STR1##

The thiohydrazide product compound is represented by Structural Formula (II): ##STR2##

In Structural Formulas (I)-(II), R.sub.1 and R.sub.2 are independently an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R.sub.1 and R.sub.2 taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. When R.sub.2 is an aryl group or a substituted aryl group, then R.sub.5 is a hydrazine protecting group; and when R.sub.2 is an aliphatic or substituted aliphatic group, then R.sub.5 is --H or a hydrazine protecting group. R.sub.10 is --H or a substituted or unsubstituted alkyl group. The method comprising the step of reacting the starting compound with a thionylating reagent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

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L1 FILE 'REGISTRY' ENTERED AT 13:29:35 ON 30 DEC 2008  
 L2 STRUCTURE UPLOADED  
 L2 111 S L1 FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 13:30:21 ON 30 DEC 2008

L3 53 S L2  
 L4 42 S L3 AND (?CANCER? OR ?CARCIN? OR ?NEOPLASM? OR ?TUMOR? OR ?TUM  
 L5 41 DUPLICATE REM L4 (1 DUPLICATE REMOVED)

=>

---Logging off of STN---

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Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	131.14	309.71
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-20.00	-20.00

STN INTERNATIONAL LOGOFF AT 13:32:30 ON 30 DEC 2008